

## #? Hoppy Pilsner

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **38**
- SRM **4.5**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5.1 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **11.2 liter(s)** of strike water to **53.8C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **40 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (89.3%)	81 %	4
Grain	Biscuit Malt	0.15 kg (5.4%)	79 %	25
Grain	Monachijski	0.15 kg (5.4%)	80 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Whirlpool	Nelson Sauvín	50 g	5 min	11 %
Whirlpool	Citra	25 g	5 min	12 %
Dry Hop	Citra	25 g	3 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	220 ml	Fermentum Mobile

### Notes

- Fermentacja w 7-8-9-10 stopniach  
hop rate 10g/l  
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